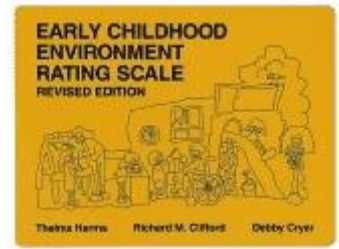


The Early Childhood Environment Rating Scale in South Carolina



The Importance of High Quality Early Childhood Education

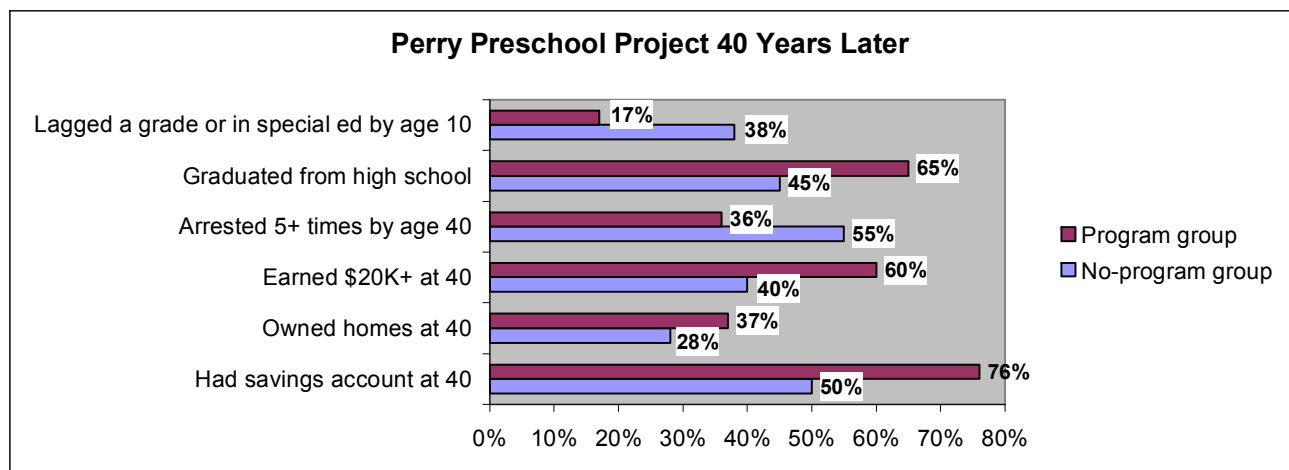
“Early learning begets later learning and early success breeds later success. The later in life we attempt to repair early deficits, the costlier the remediation becomes.”

-- James Heckman, 2000 Nobel Prize Laureate in Economics

Study after study has demonstrated the impact quality early childhood programs have on school readiness. Success or failure in a child's early years leads to success or failure in school and, consequently, throughout life. Below are highlights from four of the most significant studies of both the short-term and long-term impact high quality early childhood programs have on children.

Perry Preschool Project

This study—perhaps the most well-known of all High/Scope research efforts--examines the lives of 123 African Americans born in poverty and at high risk of failing in school. From 1962-1967, at ages 3 and 4, the subjects were randomly divided into a program group who received a high-quality preschool program based on High/Scope's active learning approach and a comparison group who received no preschool program. In the study's most recent phase, 94% of the original study participants were interviewed at age 40. Additional data were gathered from the subjects' school, social services, and arrest records.



Chicago Child-Parent Centers

The Chicago Child-Parent Centers (CPCs) provide comprehensive educational support and family support to economically disadvantaged children and their parents. The guiding principle of the program is that by providing a school-based, stable learning environment during preschool and during kindergarten through third grade, in which parents are active and consistent participants in their child's education, scholastic success will follow. The program requires parental participation and emphasizes a child-centered, individualized approach to social and cognitive development.

The CPC program was founded in 1967 to serve families in high-poverty neighborhoods that were not being served by Head Start or similar programs. The centers are part of the Chicago Public Schools system and are traditionally housed in separate buildings (primarily in preschools) or in wings of a parent elementary school. Currently, the Chicago Public Schools operate 23 Federal Title I CPC sites; 18 feature services from preschool through kindergarten, and 5 have services in preschool only. Title I stopped supporting the elementary-school portion of the program about a decade ago. Currently, children may begin the CPC program in preschool only.

Key Evaluation Findings

- CPC participants were almost 30 percent more likely to complete high school than a comparison group of equally disadvantaged children.
- Forty percent fewer CPC participants were held back in school or placed in special education.
- CPC participants had 41 percent fewer arrests for violent crime.

Abcederian Project

The Abcederian Project looked to answer the question, “Can the cumulative developmental toll experienced by high-risk children be prevented or reduced significantly by providing systematic, high-quality, early childhood education from birth through kindergarten entry?” In the early 1970s, 111 children in North Carolina participated in this study. All of these children had families that were extremely challenged in terms of very low income (well below 50% of the federal poverty level); very low levels of maternal education (about 10 years of education) and low intellectual attainment (with an average IQ near 80); mostly single parents (about 75%) and unemployed.

The children were randomly placed in a control group and a treatment group. Both groups received adequate nutrition, supportive social services, and low-cost or free primary health care. The treatment group was provided with a full day preschool program from the time the children were 6 months of age until they entered kindergarten.

Key Findings:

- Children who participated in the program had higher cognitive test scores from the toddler years to age 21.
- Academic achievement in both reading and math was higher from the primary grades through young adulthood.
- Program children completed more years of education and were more likely to attend a four-year college.
- Program children were older, on average, when their first child was born.

The Cost, Quality, and Outcome Study

The Cost, Quality, and Outcomes in Child Care Centers Study began in 1993 with the recruitment of 401 randomly selected child care centers from four states (California, Colorado, Connecticut, and North Carolina). From each of these centers, two classrooms were randomly selected for the study. Each of the selected classrooms was assessed using ECERS. The average score was 4.26, with a range of scores from 1.5 to 6.5. More than 11% of the classes scored below 3, while almost 25% scored above 5.

Children in classrooms scoring low on quality ratings were more likely to have mothers with lower levels of formal education. The study found that children in lower quality classrooms scored lower on measures of cognitive and social development, even after taking into account differences in background factors known to be related to children's development.

Key Findings:

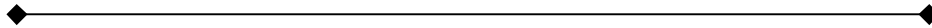
- Children who attended early childhood settings with higher quality classroom practices had better language and math skills from preschool into elementary school.
- Children with closer teacher-child relationships in early childhood settings had better classroom social and thinking skills, language ability, and math skills from preschool years into elementary school.
- Higher quality in early childhood programs was more strongly related to better math skills and fewer problem behaviors from the preschool years through second grade particularly for children whose mothers had less education.
- Children who attended higher quality early childhood programs had better thinking and social skills in the second grade, even after considering kindergarten and second grade experiences.
- Children who experienced more positive classroom climates in early childhood settings had better relationships with peers in second grade.

In order to provide care and education that will permit children to experience a high quality of life while helping them develop their abilities, a quality program must provide for the three basic needs all children have:

- Protection of their health and safety
- Building positive relationships
- Opportunities for stimulation and learning from experience

No one component is more or less important than the others, nor can one substitute for another. It takes all three to create quality care. Each of the three basic components of quality care manifests itself in tangible forms in the program's environment, curriculum, schedule, supervision and interaction, and can be observed. These are the key aspects of process quality that are included in the environment rating scales.

The scales (ECERS, ITERS, FDCERS, and SACERS) define environment in a broad sense and guide the observer to assess the arrangement of space both indoors and outdoors, the materials and activities offered to the children, the supervision and interactions (including language) that occur in the classroom, and the schedule of the day, including routines and activities. The support offered to parents and staff is also included.



What is ECERS?

- ECERS-R is a tool to assess the quality of preschool programs.
- ECERS-R is research based. It is based on best practices in early childhood education and addresses worldwide standards
- ECERS-R can be used to assess any group program serving 2 ½ through 5 year olds, regardless of the early childhood approach used.
- ECERS-R is suitable for inclusive and culturally diverse programs.
- ECERS-R has been proven reliable and valid.
- ECERS-R covers 3 basic categories: equipment, appropriate materials, and educational skills and behaviors.
- ECERS-R contains 43 items and 7 subscales (see next page). The subscales are:
 - Space and Furnishings
 - Personal Care Routines
 - Language-Reasoning
 - Activities
 - Interaction
 - Program Structure
 - Parents & Staff
- ECERS-R yields a total composite score that is an excellent overall indicator of the quality of a preschool program.
- ECERS-R is a seven point, likert-type scale ranging from 1-7 with 1=inadequate, 3=minimal, 5=good, 7=excellent.
- ECERS-R considers preschool services rated at 3 or below as “low quality,” those services rated between 3 and 5 to be of “medium quality,” and those services rated between 5 and 7 to be of “high quality” or “developmentally appropriate.”
- ECERS-R can be used as a self-study, an accountability measure, and/or a step to NAEYC (National Association for the Education of Young Children) accreditation.

Overview of the Subscales and Items

Space and Furnishings

1. Indoor space
2. Furniture for routine care, play, and learning
3. Furnishings for relaxation and comfort
4. Room arrangement for play
5. Space for privacy
6. Child-related display
7. Space for gross motor play
8. Gross motor equipment

Personal Care Routines

9. Greeting/departing
10. Meals/snacks
11. Nap/rest
12. Toileting/diapering
13. Health practices
14. Safety practices

Language-Reasoning

15. Books and pictures
16. Encouraging children to communicate
17. Using language to develop reasoning skills
18. Informal use of language

Activities

19. Fine motor
20. Art
21. Music/movement
22. Blocks
23. Sand/water
24. Dramatic play
25. Nature/science
26. Math/number
27. Use of TV, video, and/or computer
28. Promoting acceptance of diversity

Interaction

29. Supervision of gross motor activities
30. General supervision of children (other than gross motor)
31. Discipline
32. Staff-child interactions
33. Interactions among children

Program Structure

34. Schedule
35. Free play
36. Group time
37. Provisions for children with disabilities

Parents and Staff

38. Provisions for parents
39. Provisions for personal needs of staff
40. Provisions for professional needs of staff
41. Staff interaction and cooperation
42. Supervision and evaluation of staff
43. Opportunities for professional growth

The Use of ECERS in South Carolina

The environment rating scales could have a significant role in our state's efforts to raise the level of care its youngest citizens receive. The most significant impact for public schools was the mandate from the Education Oversight Committee that ECERS be used as one of the ratings criteria for schools enrolling students in grades two or below beginning school year 2003 – 2004. Beginning 2004-2005 school year, every school district must complete an Early Childhood Assets Study within their 4 and 5 K classes. The Early Childhood Assets review is made up of three parts: ECERS, DIAL 3, and SCRA.

Statutory Requirements Related to Use of ECERS

There are 3 statutes that apply to ECERS certification of state funded 4K programs. Two of the statutes do not refer to ECERS specifically, but our office has chosen ECERS, after much research, as the tool to meet the requirements of the statutes.

1. According to SC Code of Laws Section 59-19-340, public child development programs serving three-and four-year-olds fall under the oversight of the Department of Education. Prior to 2001, monitoring of public child development programs was conducted by The Department of Social Services (DSS). After an analysis of the law, public programs were found to be established in a different section of the law and fell outside the scope of those covered under SC Code of Laws, Section 20-7-2700 regarding licensing of child day care centers. ECERS is the tool selected to "monitor" the programs to meet the requirement of SC Code of Laws Section 59-19-340.
2. Second, according to Regulation, R 43-264.1, districts shall participate in evaluation efforts coordinated by the State Department of Education. ECERS is one way to assess the quality of programs, which in turn will determine the impact on school success. Our office is currently revising Guidelines so that they address the revised Regulation. ECERS will be added to the revised guideline as one of the tools to "evaluate program effectiveness."
3. Third, according to the Accountability Manual for 2003 - 2004, utilization of an environmental measure for program improvement (ECERS) will become one of the ratings criteria for schools enrolling students in grades two or below beginning school year 2003 - 2004. This is the one statute in which ECERS is specifically mentioned.

Glossary

Accessible – Accessible means children can reach and use materials, furnishings, equipment, and so forth. If materials are stored in closed spaces, they can be considered accessible only if it is observed that children can freely access and use the materials. For materials to be counted as accessible to children at the minimal (3) level, children must be able to reach and use the materials for a period of 1 hour a day in a program of 8 hours or more. The 1 hour can be provided at one time or as a combination of several periods throughout the day. This does not mean that each child must have a full hour to use the materials as long as the materials are accessible to a majority of the children. Less time is required for programs operating less than 8 hours a day, with the amount of time calculated proportionally, based on the ratio of 1 hour for programs of 8 hours or more. Use this chart to determine the approximate amount of time needed in programs operating less than 8 hours.

Number of hours in operation	3 hrs.	4 hrs.	4.5 hrs.	5 hrs.	6 hrs.	6.5 hrs.	7 hrs.
Approximate minutes required for accessibility	25	30	34	40	45	49	50

****The time requirement for accessibility only applies to Books and pictures (item 15), Fine motor (item 19), Art (item 20), Music (item 21), Blocks (item 22), Dramatic play (item 24), Nature/science (item 25), and Math/number (item 26).****

****For programs of 4 hours or less, the requirement of 1 hour of access in Gross motor equipment (item 8), Art (item 20), Sand/water (item 23), and Dramatic play (item 24) is changed to ½ hour.****

Active Centers – Active centers include materials that require more movement or generate more noise, such as music and movement, dramatic play, and block building.

Free Play – Free play is when the child is permitted to select materials and companions, and as far as possible manage play independently. Adult interaction is in response to child's needs. Situations in which children are assigned to centers by staff or staff select the materials that individual children may use do not count as free play.

Gross Motor Equipment – Gross motor equipment includes *anything* provided for or regularly permitted by the staff to be used for stimulating gross motor activity. This includes manufactures, custom-made and/or natural objects used for climbing, sliding, balancing or other gross motor activity. It does not include objects meant to be used for other purposes, such as benches to sit on, shade trees or shelves children are not supposed to climb.

Major Safety Hazards – Major safety hazards are those that are likely to cause serious injury requiring hospitalization or medical care, such as broken bones, major bleeding, drowning, or strangulation. Examples of major safety hazards are: inadequate cushioning (fall zone), open gates, unfenced play areas, uncovered electrical outlets, chemicals/cleaning products in reach of children, open "S" hooks on swings, metal slides not in shaded areas, entrapment, etc.

Many or variety – Terms such as “many” or “variety” are used throughout the scale. Numbers are provided to guide decision making for many items. However, the actual number required will depend on the number of children enrolled, and the ages and abilities of those children. In cases where there are small groups of children, the numbers provided are likely to be reasonable. However, in classrooms with 15 or more children, more materials may be needed. In considering the difference between “variety” and “many”, think about a meal provided as a buffet, compared with a meal with many courses, but not as much choice. “Variety” of choices will be provided in the buffet, while this is not necessarily true in the meal.

Minor Safety Hazards – Minor safety hazards are those that are only likely to cause mild injury, such as small cuts, bumps and bruises, and splinters. Examples of minor safety hazards are: roots, sand on sidewalk, protrusions (bolts on fences/gates), tripping hazards, etc.

Portable Equipment – Portable equipment is that which is meant to be moved or arranged by children as part of their gross motor play. Examples of portable equipment are: balls and sports equipment, wheel toys, tumbling mats, jump ropes, bean bags, and ring toss game.

Quiet Centers – Quiet centers are those where children usually play with materials that require them to sit and concentrate. These include materials such as books, manipulatives, art, puzzles, the computer, small table toys, and listening stations with earphones.

Some – The term “some” occurs most frequently in indicators that represent a minimal (3) level of quality, although occasionally it occurs at higher levels. In determining how much is needed to give credit for “some” in an indicator, consider the requirements in the parallel indicators at the lower and next higher level of quality. For example, if under “inadequate” (1) no materials are required, then some would mean “one or more”. In cases where a plural is used with the term “some”, then more than one would be required to give credit. When terms such as “very few” or “very little” or “rarely” are used under inadequate (1), then “some” represents a mid-point between what is required for the 1 and the 5 quality levels. Specific numbers are given in the notes for particular indicators.

Staff – Staff refers to those adults who are in the classroom and who work with the children daily (or almost daily), for a substantial portion of the day. This can include volunteers, if they are in the classroom for the required amount of time. Adults who are in the classroom for short periods of the day, or who are not a regular daily part of the classroom, do not count in evaluating whether the requirements of the item are met.

Stationary Equipment – Stationary equipment is that which has been installed on a playground or is anchored. However, this also includes non-anchored equipment that can be moved by adults, but that is too heavy for children to move as part of play.

Substantial Portion of the Day – A substantial portion of the day means at least one-third of the time children are in attendance. For example, 1 hour of a 3-hour program, or 3 hours of a 9-hour program. See the chart for SPOD (substantial portion of the day) requirements for other time periods.

Calculating “Substantial Portion of the Day”	
Number of hours in operation	Substantial portion (1/3) of these hours
4	1 hour, 20 minutes
4.5	1 hour, 30 minutes
5	1 hour, 40 minutes
5.5	1 hour, 50 minutes
6	2 hours
6.5	2 hours, 10 minutes
7	2 hours, 20 minutes
7.5	2 hours, 30 minutes
8	2 hours, 40 minutes
8.5	2 hours, 50 minutes
9	3 hours
9.5	3 hours, 10 minutes
10	3 hours, 20 minutes
10.5	3 hours, 30 minutes
11	3 hours, 40 minutes
11.5	3 hours, 50 minutes
12	4 hours
© 2001 Harms, Clifford, Cryer	

Calculating substantial portion of the day:

1. Figure the total number of hours that children are allowed to attend.
(7:30 a.m. to 2:30 p.m. = 7 hours)
2. Calculate 1/3 of the operating hours to determine “Substantial Portion of the Day”
(7 hours ÷ 3 = 2 hours, 20 minutes)

Frequently Asked Questions

Who is being assessed with ECERS?

During the 2003-2004 and 2004-2005 school years, only those schools enrolling students in grade two and below are being assessed with ECERS.

ECERS is designed for 2 ½ - 5 year olds. Many of our children turn 6 during the year. Is it fair to still use it?

Co-author Dick Clifford has used the scale in several national studies of kindergarten classrooms. As a result of these studies, the authors feel that ECERS can be used for work with kindergarten evaluation and program improvement efforts.

How many classes were assessed at my school?

One-third of four-year-old child development classes and one-third of kindergarten classes were assessed. Teachers were randomly selected by the assessor on-site.

Will special education classes be assessed using ECERS?

During the 2003-2004 and 2004-2005 assessments, principals may elect not to include preschool special education classes in their list of potential classrooms to be assessed. Only those special education classes with the majority of children in the developmental range of 2 ½ - 5 years would be assessed with ECERS.

What portions of the scale are used?

The 2004-2005 school year, programs were assessed with all 43 items of the scale.

What are the State Department's plans for preparing schools for the use of ECERS?

Currently, the Office of Early Childhood, in partnership with the Department of Social Services and Head Start, is developing training materials for each of the seven subscales. As soon as that material is finished, it will be made available. Additionally, training will soon begin for qualified individuals to offer technical assistance. If staff members or administrators have specific questions concerning an individual item or the use of the scale itself, please contact Robin Snipes, (803) 734-1107 or Rsnipes@sde.state.sc.us.

How can I get the Additional Notes for Clarification?

The South Carolina specific additional notes for clarification can be downloaded from the Office of Early Childhood Education's website (www.myschools.com/offices/ece). The general additional notes can be downloaded from the Frank Porter Graham website (www.fpg.unc.edu/ecers).

Why isn't food considered an acceptable art material for children?

Edible materials, such as chocolate pudding, dried pasta, popcorn, etc., cannot be counted as art materials because they send the wrong message about the proper use of food. The possible health (sanitary issues), safety (e.g., choking hazards), and supervision consequences of using food in art are considered under items 13 (health practices), 14 (safety practices), and 30 (general supervision of children). Additionally, many children come from homes where food cannot be wasted. Using food in art causes a conflict in the messages given at home and school.

Is anti-bacterial gel an acceptable substitute for handwashing?

Antiseptic waterless washes or wipes are not acceptable substitutes for proper handwashing with liquid soap and warm running water except under very special circumstances such as when running water is not readily available. Otherwise, hands must be washed following proper handwashing techniques. In addition, the safety consequences of using waterless washes are considered under item 14 (safety practices) because of the flammability and toxicity.

Why were some of the books in my classroom considered inappropriate?

According to *All About the ECERS-R*, "Books and other language materials that contain graphic violence or frightening content are not considered appropriate for any preschool-kindergarten children. Children of this age often cannot distinguish between imaginary and real occurrences, and therefore many young children find violence in books very upsetting or get an incorrect message about how to behave. Young children empathize with imaginary people, animals, or other creatures who are depicted as the victims of violence and may become concerned for their own safety if such books are read to them or they look at violent pictures."

Sample Schedules

Half Day (2.5 hours) Program

Accessibility (items 15, 19, 20, 21, 22, 24, 25, 26) – 20 minutes

Substantial Portion of the Day – 50 minutes

8:00 – 8:20	Arrival, wash hands, quiet centers open (cozy book area, computer, writing table, math, science, manipulatives)
8:20 – 8:40	Morning meeting
8:40 – 9:30	Centers
9:35 – 10:00	Outdoor play
10:00 – 10:20	Wash hands, snack, story
10:20 – 10:30	Review of the day, prepare for dismissal
10:30	Dismissal

Full Day (6.5 hours) Program

Accessibility (items 15, 19, 20, 21, 22, 24, 25, 26) – 49 minutes

Substantial Portion of the Day – 2 hours, 10 minutes

8:00 – 8:30	Arrival, wash hands, quiet centers open (cozy book area, computer, writing table, math, science, manipulatives)
8:30 – 8:50	Morning meeting
8:50 – 10:15	Centers
10:15 – 10:30	Story, prepare for lunch
10:30 – 11:00	Lunch
11:00 – 12:00	Quiet time
12:00 – 12:45	Outdoor play
12:45 – 1:00	Wash hands, water
1:00 – 1:45	Centers (snack center open)
1:45 – 2:05	Gross motor
2:05 – 2:30	Review of day, pack-up, manipulatives tubs
2:30	Dismissal

USDA Meal Guidelines Ages 1-12

BREAKFAST

Food Components	Ages 1-2	Ages 3-5	Ages 6-12 ¹
1 serving milk fluid milk	½ cup	¾ cup	1 cup
1 fruit/vegetable juice ² , fruit and/or vegetable	¼ cup	½ cup	½ cup
1 grains/bread ³ bread or cornbread or biscuit or roll or muffin or cold dry cereal or hot cooked cereal or pasta or noodles or grains	½ slice ½ serving ¼ cup ¼ cup ¼ cup	½ slice ½ serving 1/3 cup ¼ cup ¼ cup	1 slice 1 serving ¾ cup ½ cup ½ cup

LUNCH OR SUPPER

1 milk fluid milk	½ cup	¾ cup	1 cup
2 fruits/vegetable juice ² , fruit and/or vegetable	¼ cup	½ cup	¾ cup
1 grains/bread ³ bread or cornbread or biscuit or roll or muffin or cold dry cereal or hot cooked cereal or pasta or noodles or grains	½ slice ½ serving ¼ cup ¼ cup ¼ cup	½ slice ½ serving 1/3 cup ¼ cup ¼ cup	1 slice 1 serving ¾ cup ½ cup ½ cup
1 meat/meat alternate meat or poultry or fish ⁴ or alternate protein product or cheese or egg or cooked dry beans or peas or peanut or other nut or seed butters or nuts and/or seeds ⁵ or yogurt ⁶	1 oz. 1 oz. 1 oz. ½ ¼ cup 2 Tbsp. ½ oz. 4 oz.	1 ½ oz. 1 ½ oz. 1 ½ oz. ¾ 3/8 cup 3 Tbsp. ¾ oz. 6 oz.	2 oz. 2 oz. 2 oz. 1 ½ cup 4 Tbsp. 1 oz. 8 oz.

SNACK – Select 2 of the 4 components

1 milk fluid milk	½ cup	½ cup	1 cup
1 fruit/vegetable juice ² , fruit and/or vegetable	½ cup	½ cup	¾ cup
1 grains/bread ³ bread or cornbread or biscuit or roll or muffin or cold dry cereal or hot cooked cereal or pasta or noodles or grains	½ slice ½ serving ¼ cup ¼ cup ¼ cup	½ slice ½ serving 1/3 cup ¼ cup ¼ cup	1 slice 1 serving ¾ cup ½ cup ½ cup
1 meat/meat alternate meat or poultry or fish ⁴ or alternate protein product or cheese or egg or cooked dry beans or peas or peanut or other nut or seed butters or nuts and/or seeds ⁵ or yogurt ⁶	½ oz. ½ oz. ½ oz. ½ 1/8 cup 1 Tbsp. ½ oz. 2 oz.	½ oz. ½ oz. ½ oz. ½ 1/8 cup 1 Tbsp. ½ oz. 2 oz.	1 oz. 1 oz. 1 oz. ½ ¼ cup 2 Tbsp. 1 oz. 4 oz.

Footnotes

¹ Children age 12 and older may be served larger portions based on their greater food needs. They may not be served less than the minimum quantities listed in this column.

² Fruit or vegetable juice must be full-strength. Juice cannot be counted as the second snack item if the other snack item is milk.

³ Breads and grains must be made from whole-grain or enriched meal or flour. Cereal must be whole-grain or enriched or fortified.

⁴ A serving consists of the edible portion of cooked lean meat or poultry or fish.

⁵ Nuts and seeds may comprise only half of a meat/meat alternate serving and must be combined with another meat/meat alternate to fulfill the lunch or supper requirement.

⁶ Yogurt may be plain or flavored, unsweetened or sweetened.

Source: Child and Adult Care Food Program, USDA Food and Nutrition Service **Updated 5/28/03**
www.nal.usda.gov/childcare/Cacfp/index.html

Playground Information to Use with the Environment Rating Scales

Based on information from the U.S. Consumer Product Safety Commission, Handbook for Public Playground Safety, Pub. No. 325. These guidelines are a basic overview of areas to review when scoring playground and safety items in the ECERS-R, ITTERS-R, FDCRS, or SACERS. This list is not to be used as a comprehensive guide for playground assessment.

Catch Points and Protruding Hardware – There should be no dangerous pieces of hardware, such as protruding bolt ends and narrow gaps in metal connections or open "S" hooks at the top and bottom of swings. Exposed hardware can cut children, puncture skin, or catch clothing drawstrings, which could strangle a child. The top of fences less than 4 feet in height also should be checked for protrusions.

Entrapment – Children can get trapped and strangle in openings where they can fit their bodies but not their heads through the space. Therefore openings in guardrails, spaces between platforms, between ladder rungs, and uprights in protective barriers, should measure less than 3.5 inches or more than 9 inches. However, if the ground is the bottom edge of a space between 3.5 inches and 9 inches, it is not considered an entrapment hazard because the child will not be in danger of choking.

Pinch, Crush, Shearing, and Sharp Hazards – Equipment should not have sharp points or edges that could cut skin. Moving pieces of equipment, such as suspension bridges, track rides, merry-go-rounds, or seesaws, should not have accessible moving parts that might crush or pinch a child's finger or other body part.

Protective Barriers – A protective barrier is an enclosing device around an elevated platform that is intended to prevent both inadvertent falls from the platform and deliberate attempts to pass through the barrier. In other words, children should not be able to jump over it or move through it.

For preschoolers, full protective barriers are preferred because they provide more protection from falls. Protective barriers are required for platforms that are over 30 inches above the ground. The top surface of the barrier should be at least 29 inches above the platform. No child should be able to climb over, under or through the barrier. For equipment used *only* by school-aged children, including 5-year-olds, any platform more than 48 inches above the ground requires protective barriers. The top surface of the protective barrier must be at least 38 inches high.

Guardrails – A guardrail is an enclosing device around an elevated platform that is intended to prevent inadvertent falls from the platform. A child might be able to climb over, under or through the guardrail.

For preschoolers through 4 years of age, guardrails prevent falls from elevated platforms that are higher than 20 inches, and up to 30 inches, above the ground. For preschoolers through 4 years of age, the top surface of the guardrails should be at least 29 inches above the platform, and the lower edge should be no more than 23 inches above the platform. For equipment used *only* by school-aged children, including 5-year-olds, any platform more than 30 inches above the ground (but not over 48 inches above the ground) will need guardrails at least 38 inches above the platform, with the lower edge no more than 28 inches above the platform.

When mixed age groups of preschool- and school-aged children use the same equipment (e.g., 4- and 5-year-olds) the most stringent requirements are applied to ensure safety for all. For example, platforms used by the group will require protective barriers, rather than guardrails if they reach the height listed for preschoolers. Guardrails and barriers must be of the height required for school-aged children, which is higher than required for preschoolers.

Platforms that are layered on equipment, (e.g., one platform leading up to another in a step-like manner), so that it would be impossible for preschoolers to fall more than 20 inches from one level to another (or school-aged children to fall 30 inches to another platform) do not require barriers or guardrails if they would interfere with the intended use of the equipment (e.g., stepping up to the next level).

Tripping Hazards – There should be no exposed concrete footings, abrupt changes in surface elevations, tree roots, tree stumps, or rocks, which can trip children or adults.

Protective Surfacing – The surfaces under and around play equipment should be soft enough to cushion falls, which are the most frequent causes of injuries on playgrounds. For specifics on depth of material, see the chart below. When the surfacing in much used areas becomes displaced (e.g., under swings, slides) it should be raked back or replaced to maintain correct depth.

Fall Zones – Resilient surfacing shall extend beyond the external limits of stationary equipment for a minimum of 6 feet. Swings shall have resilient surfacing that extends 2 times the length of the pivot point to the surface below. The surfacing shall be to the front and rear of the swing. Tot swings shall have resilient surfacing that extends 2 times the length of the pivot point to the bottom of the swing seat, both in the front and rear of the swing. Tot swings are defined as swings with enclosed seats. Tire swings shall have resilient surfacing that extends a distance of 6 feet plus the measurement from the pivot point to the swing seat and 6 feet to the side of the support structure.

Equipment Spacing – Play structures should be spaced at least 12 feet apart to allow children space to circulate around or fall without striking another structure. Moving pieces of equipment should be located in an area away from other play structures so children have adequate room to pass from one play area to another without being struck by a moving swing or by another child exiting from a slide.

Critical Heights of Playground Equipment for Various Types and Depths of Resilient Surfaces

Based on Information from the U.S. CONSUMER PRODUCT SAFETY COMMISSION (CPSC Publication No. 325), Handbook for Public Playground Safety. When no requirement is provided for a specific height of equipment, we have used the requirement for the next higher height, so requirements are conservative, erring on the side of safety.

	Wood Chips	Double Shredded Bark	Uniform Wood Chips	Fine Sand	Coarse Sand	Fine Gravel
Equipment Height	**Uncompressed Depths of Materials in Fall Zone**					
Five feet or less	6 inches	6 inches	6 inches	6 inches	6 inches	6 inches
Six feet	6 inches	6 inches	6 inches	12 inches	12 inches	6 inches
Seven feet	6 inches	9 inches	9 inches	12 inches	12 inches	9 inches
Eight feet	9 inches	9 inches	12 inches	12 inches	12 inches	12 inches
Nine feet	9 inches	9 inches	12 inches	12 inches	N/A	12 inches
Ten feet	9 inches	9 inches	12 inches	N/A	N/A	12 inches

For poured or installed foam or rubber surfaces, the materials must meet the ASTM F1292 requirements. Verify through a written statement from the manufacturer.

South Carolina Department of Education



Office of Early Childhood Education

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